State of Tennessee
DEPARTMENT OF EDUCATION

Response to Request for Proposals
REQUEST FOR PROPOSALS # 33150-02211

P-12 LDS- EARLY WARNING DATA SYSTEM

June 1, 2011

QUALIFICATIONS EVIDENCE

Response Submitted By

EDMIN

5471 Kearny Villa Road, Suite 310
San Diego, CA 92123

Primary Point of Contact:

Sage Ann Scheer, Ph.D.
sscheer@edmin.com
(619) 253-1691

QUALIFICATIONS EVIDENCE GUIDE

The Proposer must address all items detailed below and provide, in sequence, the information and documentation as required (referenced with the associated item references). The Proposer must also detail the proposal page number for each item in the appropriate space below, and use this guide to cover the Qualifications Evidence section of the proposal (as its table of contents).

Prior to State evaluation of Qualifications Evidence, the RFP Coordinator will review each proposal for compliance with all RFP requirements, including but not limited to:

- The proposal must be delivered to the State no later than the Proposal Deadline.
- The Qualifications Evidence and the Cost Proposal must be packaged separately as required.
- The Qualifications Evidence must NOT contain cost or pricing information of any type.
- The proposal must NOT contain any qualification, limitation, or other restrictions.

The Proposal Evaluation Team will, then, review the Qualifications Evidence to determine if the mandatory requirement items are addressed as required and that it documents that the Proposer meets each mandatory qualification and experience requirement and is otherwise, at least, minimally acceptable as a contractor for the subject services.

PROPOSER LEGAL ENTITY NAME:		
Proposal Page # (Proposer completes)	**Item Ref.**	**QUALIFICATIONS EVIDENCE**
Page 3	**6.2.1.**	Detail the name, e-mail address, mailing address, telephone number, and facsimile number of the person the State should contact regarding the proposal.
Pages 4-5	**6.2.2.**	Provide the RFP Attachment 6.1., *Proposal Statement of Certifications and Assurances* completed and signed by an individual empowered to bind the Proposer to the provisions of this RFP and any resulting contract. The document must be signed without exception or qualification.
Page 6	**6.2.3.**	Provide a statement, based upon reasonable inquiry, of whether the Proposer or any individual who shall perform work under the contract has a possible conflict of interest (*e.g.*, employment by the State of Tennessee) and, if so, the nature of that conflict. *Any questions of conflict of interest shall be solely within the discretion of the State, and the State reserves the right to reject any proposal or cancel any award.*
Page 7	**6.2.4.**	Provide a statement of whether the Proposer or, to the Proposer's knowledge, any of the Proposer's employees, agents, independent contractors, or subcontractors, proposed to provide work on a contract pursuant to this RFP, have been convicted of, pled guilty to, or pled *nolo contendere* to any felony. If so, include an explanation providing relevant details. *Any issues relating to such a matter shall be solely within the discretion of the State, and the State reserves the right to reject any proposal or cancel any award.*
Page 8	**6.2.5.**	Provide a statement of whether there is any material, pending litigation against the Proposer that the Proposer should reasonably believe could adversely affect its ability to meet contract requirements pursuant to this RFP or is likely to have a material adverse effect on the Proposer's financial condition. If such exists, list each separately, explain the relevant details, and attach the opinion of counsel addressing whether and to what extent it would impair the Proposer's performance in a contract pursuant to this RFP. *Any issues relating to such a matter shall be solely within the discretion of the State, and the State reserves the right to reject any proposal or cancel any award.* *All persons, agencies, firms, or other entities that provide legal opinions regarding the Proposer must be properly licensed to render such opinions. The State may require the Proposer to submit proof of such licensure detailing the state of licensure and licensure number for each person or entity that renders such opinions.*
Pages 9-10	**6.2.6.**	Provide evidence that the Proposer is a Microsoft Certified Partner.
Pages 11-41	**6.2.7**	Provide evidence that the Proposer has previously implemented their data model in a K-12 Local Education Agency or State Education Agency.

PROPOSER LEGAL ENTITY NAME:		
Proposal Page # (Proposer completes)	**Item Ref.**	**QUALIFICATIONS EVIDENCE**
	6.2.1.	Detail the name, e-mail address, mailing address, telephone number, and facsimile number of the person the State should contact regarding the proposal. **EDmin's Response:** Primary Contact: Sage Ann Scheer, Ph.D. Title: Vice President, Strategic Sales E-mail: sscheer@edmin.com Address: 5471 Kearny Villa Road, Suite 310, San Diego, CA 92123 Mobile: (619) 253-1691 Phone: (858) 712-9341 ext. 106 or (800) 748-6696 Fax: (858) 712-9451 Authorized Representative: D. Clayton Hoyle Title: Co-Founder & Vice President, Strategic Partnerships and Business Development E-mail: clayton@edmin.com Address: 5471 Kearny Villa Road, Suite 310, San Diego, CA 92123 Mobile: (619) 850-8100 Fax: (858) 712-9448

	6.2.2.	Provide the RFP Attachment 6.1., *Proposal Statement of Certifications and Assurances* completed and signed by an individual empowered to bind the Proposer to the provisions of this RFP and any resulting contract. The document must be signed without exception or qualification. **EDmin's Response:** Attachment 6.1, *Proposal Statement of Certifications and Assurances* has been completed and signed by D. Clayton Hoyle, Co-Founder and Vice President, Strategic Partnerships and Business Development. The form is provided on page 5 of this response.

PROPOSAL STATEMENT OF CERTIFICATIONS AND ASSURANCES

An individual legally empowered to contractually bind the Proposer must sign and complete the *Proposal Statement of Certifications and Assurances* below as required, and this signed statement must be included with the proposal as required by the RFP Attachment 6.2.

The Proposer does, hereby, expressly affirm, declare, confirm, certify, and assure ALL of the following:

1. The Proposer will comply with all of the provisions and requirements of the RFP.

2. The Proposer will provide, for the total contract period, all services defined in the Scope of Services specified by the *Pro Forma Contract* attached to the RFP.

3. The Proposer accepts and agrees, without qualification, to all terms and conditions set out by the *Pro Forma Contract* attached to the RFP.

4. The Proposer acknowledges and agrees that a contract resulting from the RFP shall incorporate, by reference, all proposal responses as a part of the contract.

5. The Proposer will comply, as applicable, with:

   (a) the laws of the State of Tennessee;
   (b) Title VI of the federal Civil Rights Act of 1964;
   (c) Title IX of the federal Education Amendments Act of 1972;
   (d) the Equal Employment Opportunity Act and the regulations issued there under by the federal government; and,
   (e) the Americans with Disabilities Act of 1990 and the regulations issued there under by the federal government.

6. To the knowledge of the undersigned, the information detailed within the proposal submitted in response to the RFP is accurate.

7. The proposal submitted in response to the RFP was independently prepared, without collusion, under penalty of perjury.

8. No amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Proposer in connection with the RFP or any resulting contract.

> By signature below, the signatory certifies legal authority to bind the proposing entity to the provisions of this RFP and any contract awarded pursuant to it. The State may, at its sole discretion and at any time, require evidence documenting the signatory's authority to legally bind the proposing entity.

PROPOSER SIGNATURE & DATE: 5/31/2011

PRINTED NAME & TITLE: D. Clayton Hoyle, Co-Founder & Vice President Strategic Partnerships and Business Development

PROPOSER LEGAL ENTITY NAME: EDmin.com, Inc.

PROPOSER FEIN or SSN: 33-0442913

	6.2.3.	Provide a statement, based upon reasonable inquiry, of whether the Proposer or any individual who shall perform work under the contract has a possible conflict of interest (*e.g.*, employment by the State of Tennessee) and, if so, the nature of that conflict.
		Any questions of conflict of interest shall be solely within the discretion of the State, and the State reserves the right to reject any proposal or cancel any award.
		EDmin's Response:
		To the best of our knowledge, there is no conflict of interest (e.g., employment by the State of Tennessee) with any current or past EDmin employee. EDmin has never hired any individuals who have previously worked for the State of Tennessee.

	6.2.4.	Provide a statement of whether the Proposer or, to the Proposer's knowledge, any of the Proposer's employees, agents, independent contractors, or subcontractors, proposed to provide work on a contract pursuant to this RFP, have been convicted of, pled guilty to, or pled *nolo contendere* to any felony. If so, include an explanation providing relevant details.
		Any issues relating to such a matter shall be solely within the discretion of the State, and the State reserves the right to reject any proposal or cancel any award.
		EDmin's Response:
		EDmin has never hired an individual who has been convicted of, pled guilty to, or pled *nolo contendere* to any felony. This includes employees, independent contractors, consultants, or subcontractors.

	6.2.5.	Provide a statement of whether there is any material, pending litigation against the Proposer that the Proposer should reasonably believe could adversely affect its ability to meet contract requirements pursuant to this RFP or is likely to have a material adverse effect on the Proposer's financial condition. If such exists, list each separately, explain the relevant details, and attach the opinion of counsel addressing whether and to what extent it would impair the Proposer's performance in a contract pursuant to this RFP. *Any issues relating to such a matter shall be solely within the discretion of the State, and the State reserves the right to reject any proposal or cancel any award.* *All persons, agencies, firms, or other entities that provide legal opinions regarding the Proposer must be properly licensed to render such opinions. The State may require the Proposer to submit proof of such licensure detailing the state of licensure and licensure number for each person or entity that renders such opinions.* **EDmin's Response:** EDmin does not have any pending litigations, citations, bankruptcy, or discipline action that has been taken against the organization that would adversely affect EDmin's ability to meet contract requirements pursuant to this RFP. EDmin has never been sued by any client, nor has EDmin initiated any legal action against a client.

6.2.6. Provide evidence that the Proposer is a Microsoft Certified Partner *or member of the Microsoft Partner Network.*

EDmin's Response:

EDmin is a Network Member of the Microsoft Partner Network and is currently working towards a Silver Certified Competency in web development. The following is provided as evidence of EDmin's current Microsoft member status.

Evidence of Network Membership:

Evidence of Silver Web Development Status:

Select Location
EDMIN (HQ) (San Diego)   [ ] Select

Manage Your Competencies

The Competency Summary shows your achieved and in-progress Competencies. As you add Customer References, Microsoft Certified Professionals or Tested Products, the Summary will reflect your changes.

How do I earn a new Competency?

Competency Summary   Microsoft Certified Professionals   Trainings   Customer References   Tested Products   Competency Requirements

Keep your organization profile up-to-date to make the most of your membership. Click here to update.

Your membership renewal date is May 31, 2012

For questions about benefits, click here

Enrollment Status

In Progress

Silver Web Development ⊕
Silver | Gold

References

You must have a total of three assigned customer references

	Name	Location	Expiration
	INSTRUCT and Interventions Implementation	EDMIN, San Diego	5/27/2013
	Required	---	---
	Required	---	---

Business Assessments

You must complete one Microsoft Licensing Online Assessment

	Name	Location	Expiration
	Ray Frohnhoefer	EDMIN, San Diego	5/22/2013

6.2.7 Provide evidence that the Proposer has previously implemented their data model in a K-12 Local Education Agency or State Education Agency.

EDmin's Response:

EDmin has read and fully understands the terms and conditions governing this RFP and agrees to abide by them. In preparation for this submission, we carefully reviewed the RFP, including the scope of services, standard terms and conditions, and special terms and conditions. We are confident that our submission meets or exceeds all of the essential requirements set forth in the RFP. EDmin acknowledges receipt of Amendment #1, dated May 25, 2011.

The following information is provided to demonstrate EDmin's proposed data model and reporting application – the *INFORM® Learning System* – has been implemented in K-12 Local Education Agencies and State Education Agencies.

EDmin realizes that the Tennessee Department of Education (DOE) may be looking for a vendor to build the Longitudinal Data System for the DOE; however, EDmin is proposing a solution that is deliverable today and that can be customized to meet the State's specific needs. The current system utilizes standardized security (i.e., 128-bit encryption, authorization/authentication procedures) and the solution has never been compromised since its introduction in 1998 to the commercial marketplace. EDmin requests that the Tennessee DOE evaluate our submitted proposal on the basis of having a system that is deliverable immediately, can easily be personalized or customized to meet the needs to the DOE, and is extremely cost-affordable, yet highly effective in helping school districts with school improvement planning, executing, and monitoring/evaluating.

The solution that EDmin proposes, the *INFORM® Learning System*, provides dashboards, key performance indicator reports, and metrics that provide an alert notification solution that meets the requirements of the Early Warning Data System (EWDS). Dashboards and Key Performance Indicator reports enable school principals and teachers to continuously monitor student performance using metrics and indicators selected by the Tennessee DOE and/or the local education agencies (LEAs). EDmin realizes that the initial set of indicators will focus on attendance, behavior, and course completion; however, the solution enables the DOE to add any indicator at any time to scale to meet reporting and student learning needs. With EDmin's Alert Notification reporting capabilities, principals and teachers will receive automatically generated e-mails with the most current reports so that with the click of a mouse users can immediately see performance results and review high-risk students for timely interventions. The Key Performance Indicator reports will enable the Tennessee DOE and individual districts/LEAs to monitor cohorts of students longitudinally, using selected indicators to measure such factors as high school graduation requirements, college readiness, and career preparedness.

EDmin has had several statewide contracts for delivering longitudinal data systems in various reporting formats for grades Pre-K through 12; these include

Maine, New Mexico, Wyoming, and Hawaii. EDmin's first statewide contract was with New Mexico in 2001; followed by Maine in 2003-2004, Hawaii in 2006; and Wyoming from 2001-2009. All of these contracts utilized an early warning/alert system to notify principals and teachers about lagging student performance. This enables students who potentially would fall behind to be identified quickly so that timely interventions could be implemented. For every contract, EDmin prepared a detailed project work plan (a sample Annual Work Plan is included in our response as well). All of the state contracts were for comprehensive academic data warehouses that tracked student performance against specific indicators identified by the state DOE, or in collaboration with the state DOE and the districts/LEAs.

One example of EDmin's implementation of a statewide longitudinal data system is in the Wyoming Department of Education. Wyoming is being provided as a reference because it is similar to the scope of services Tennessee DOE is requesting, is similar to the other statewide implementations EDmin has completed, and is the most recent statewide implementation.

EDmin's solution is built upon a Microsoft MS-SQL platform and development occurs using .NET. In all instances, EDmin set up the *INFORM® Learning System* to provide state data, District level data, School Level Data, Class Level Data, Student Level Data, and Staff Level Data (e.g., staff above the teacher level who needed access to student level data). The solutions deployed statewide are role-based as set forth in Tennessee's RFP requirements A.5.2.f.i-iv. EDmin's statewide solutions enabled the state DOE to have access to aggregate data from each district or LEA (actual student data was available unless the DOE did not want to see individual student data), and the individual districts and/or LEAs had access to district-wide data down to the student level.

The Wyoming DOE received reports on student achievement aligned to State standards/skills, as well as from state-determined performance indicators (e.g., grades, attendance, course completion, interventions, behavior, etc.). Reports were generated on a designated basis (e.g., quarterly, monthly, weekly, etc.) for local districts based on the districts' assessment calendars. The data collected measured student progress as evidenced by achievement scores from high-stakes state tests, district benchmarks, third-party normed tests (e.g., ACT, SAT, TerraNova, ITBS, NWEA, etc.), and in some cases locally generated data from short cycle assessments, interim assessments, or project-based curriculum. Each statewide contract contained comprehensive reporting capabilities (e.g., longitudinal, dashboard, key performance indicators, tabular, graphical, etc., where authorized and authenticated users could drill-down, based upon the security role of the user, from seeing entire classes of students to viewing individual student performance).

The data was imported into the *INFORM Learning System* by EDmin and made available to the Wyoming DOE and local districts/LEAs in display formats that included tabular, graphical, dashboard, and key performance indicator reports. Reports were available to administrators (district personnel, principals, departmental specialists, etc.) and included the ability to drill-down from entire

grade-level data to classes, groups, and individual students. As assessment data was collected, the results were made available to all authorized and authenticated user roles and were accessed either by directly logging into the solution, or having the report data e-mailed to authorized/authenticated users (e.g., teachers).

The *INFORM Learning System* contains color-coding, so results were easily interpreted and authorized/authenticated users immediately identified students who were high risk, low risk, and performing at acceptable levels. The solution enabled users to use filters to query sub-groups (e.g., Special Education, English Language Learners, Interventions, etc.) and see the students associated with each sub-groups. Users were able to view performance in tabular formats where the students could be grouped using the color-coding that the state determined, as well as the cut-points for each type of assessment, in graphical display views that also contained drill-down capabilities. The system also enabled the user to access the electronic CUME file to see all of the performance mapped to the student for the duration of the student's tenure in the district, see select interventions, calendars, digital student portfolios containing authentic samples of student work, and personal information captured from the district's Student Information System (SIS) such as parental/guardian contact information, student class schedules, most current progress monitoring results, etc.

The solution enabled authorized/authenticated users to make key instructional decisions regarding differentiated instruction, interventions, lesson planning, and instructional methodology to ensure that every student's learning needs were addressed. User comments from semi-annual User Group meetings state that the system is "Easy to use, powerful, and intuitive. The color-coding helps to quickly identify those students who need assistance beyond typical classroom instruction and enabled us to make timely decisions regarding curriculum scope and sequencing, differentiated instruction, and implementation of intervention strategies."

EDmin is providing information in the following sections to further demonstrate implementation of our proposed solution in other states and district/LEA organizations:

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Client References	14
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CLIENT REFERENCES

Customer Name: Wyoming Department of Education
Address: Hathaway Building, Cheyenne, WY
Contact Name: Judy Steingass
Contact Title: State of Wyoming Trainer/Director of Technology at Sheridan Public Schools
Contact Phone Number: (307) 655-3426
Contact Email: judy@sheridan.k12.wy.us
Contract Period: 2001-2009
Number of Students: 88,000
Number of School Sites: 48

Wyoming used the following *INFORM Learning System* applications: *INFORM Learning System* academic data warehouse that included reporting, assessment, resources, and collaboration tools. Reports consisted of longitudinal tracking of high stakes state test data, NWEA diagnostic assessments, district benchmarks, and third-party assessment data. Additionally, the districts were able to bring in other achievement indicators such as report card grades, attendance, interventions, behavior data, etc. Dashboard reporting was introduced that enabled authorized and authenticated users to view student performance longitudinally and use the predictive forecasting tools to see how students would perform on future assessments.

The state used a regional train-the-trainer approach to bring the solution to every district within the state. Each district was set up as an individual instance and the sites then rolled up to the state database where the students were anonymized for reporting purposes. Training of district personnel was determined by a geographic regional approach. Training occurred during state-held school improvement planning conferences where attendance by every district was required, as well as at regularly scheduled training sessions held regionally. Training focused on reporting first, multiple bodies of evidence second, and on the assessment/ resources/collaboration tools as the third component.

Customer Name: Clark County School District
Address: 4212 Eucalyptus Avenue, Las Vegas, NV 89121
Contact Name: Ms. Sue Daellenbach
Contact Title: Assistant Superintendent
Contact Phone Number: (702) 799-1041
Contact Email: SDaellenbach@interact.ccsd.net
Contract Period: 1/1/2003 – present
Number of Students: 303,448
Number of School Sites: 319
Estimated Number of Teachers: 15,930

Clark County School District (CCSD), Nevada is the sixth largest school district in the United States. Clark County School District has the highest foreclosure and unemployment rate in the United States, yet CCSD has used the *INFORM Learning System* to achieve their Adequately Yearly Progress (AYP) for the three of the last four years (the only school district in the top 10 to do so), and credits the

INFORM Learning System as a reason for the district's success.

CCSD has been using the INFORM Instructional Data Management System since January 2003. The project focus has been on providing data seamlessly from the high stakes state test, district benchmarks, and any third-party data to the classroom teacher in a timely manner that supports instructional planning and interventions. The project was planned out to be deployed incrementally given the size of the district. Within one year, every building in the district and all of the classrooms were implemented.

CCSD is using the following *INFORM Learning System* applications: *INFORM Learning System* Dashboard, Longitudinal and Graphical Reporting/Instructional Data Management System academic data warehouse; Test Building Module for powerful assessments aligned to curriculum pacing; ETS® Formative Assessment Item Bank of grade-level specific assessment questions aligned to Nevada Academic Standards; Online and paper/pencil testing; EZScan capabilities for immediate test results; Performance Center for tailored role-based reporting; Curriculum Pacing Guides; Standards-aligned Resources; Assessment Literacy Modules; and Assessment Training Institute.

EDmin is well known for its strong implementation and project planning. CCSD was provided training based on a "Train-the-Trainer" approach so that a core group of teachers are thoroughly trained and capable of functioning in their respective roles. This approach built capacity within CCSD and reduced the dependency upon EDmin or a third party to provide required training services after the initial implementation. CCSD staff mentor, coach, and guide the training throughout the district.

EDmin offered a combination of a "Train-the-Trainer" model coupled with direct user training. This hybrid model is essential for several reasons:

- Different aspects of the solution require greater in depth knowledge at the district level of how the different solutions work together.
- The solution providers have identified effective training models for individual applications; however, comprehensive system administrator training is needed at the district level to coordinate and facilitate the solution integration.
- Teacher training is quite different from system administrator training.
- Phased-in implementation plans allow for concurrent types of training to occur. The hybrid model allows district's to receive cost-effective professional development that maximizes its investment while minimizing the impact on staff.

EDmin provides CCSD with a designated Client Relationship Manager and a Client Engagement Manager, both of whom are available to the district 24/7.

EDmin also offers 24/7 access for clients to the EDmin Help Desk. CCSD has access to either their Client Relationship Manager, its Client Engagement Manager, or the EDmin Help Desk for any issue or concern. EDmin's training methodology enabled CCSD to train more than 2,000 teachers within a week's period of time.

Customer Name: Lake Washington School District
Address: 16250 NE 74th Street, Redmond, WA 98073
Contact Name: Dr. Chip Kimball
Contact Title: Superintendent
Contact Phone Number: (425) 702-3285
Contact Email: ckimball@lwsd.org
Contract Period: 2000 - Present
Products: INFORM Learning System/INSTRUCT
Number of Students: 23,799
Number of School Sites: 55
Estimated Number of Teachers: 1,230

Lake Washington School District is located in Redmond, Washington (the site of Microsoft's corporate office) and the district's use of technology is nationally-acclaimed. EDmin began a district-wide implementation of our professional development tracking solution (*INSTRUCT*) for Lake Washington in 1997. Since that time, the district has added comprehensive assessment, reporting, and resources. Lake Washington has renewed its contract with EDmin every year since 1997. Components/modules of EDmin's *INFORM Learning System* are deployed in every building in the district.

Lake Washington uses the following *INFORM Learning System* applications: *INFORM Learning System* Reporting/Performance Center for tailored role-based reporting (i.e., longitudinal, predictive, forecasting, key performance indicator cohort reporting, Alert Notification, etc.); Test Building Module for powerful assessments aligned to curriculum pacing; *ETS Formative Assessment Item Bank* of grade-level specific assessment questions aligned to Washington State Learning Standards; Online and paper/pencil testing; EZScan capabilities for immediate test results; Curriculum Pacing Guides; and *Curriculum Matrix/Recommendation Engine* for standards-aligned resources.

Lake Washington elected to purchase training based on a "Train-the-Trainer" approach so that core groups of teachers and staff are thoroughly trained and capable of functioning in their respective roles. EDmin also provided direct user training for technical staff, administrators, and others during implementation of each new module. This approach has built capacity within the district and reduced the dependency upon EDmin training services after the initial implementation of each new module.

District/Customer Name: Springfield Public Schools
Address: Kraft Administrative Center, 940 North Jefferson, Springfield, MO 65802
Contact Name: Dr. Matthew Goodman
Contact Title: Director, Quality Improvement & Accountability at Springfield Public Schools
Contact Phone Number: (417) 523-0306
Contract Period: 2008 – Present
Number of Students: 24,295
Number of School Sites: 54
Number of Teachers: 1,600

Another implementation, Springfield Public Schools (Missouri), stands out both for the amount of time the implementation took and the number of components deployed. Springfield Public Schools, a district of 24,000 students, elected to implement the assessment, reporting, and professional development segments of the *INFORM Learning System* district-wide. Within sixty (60) days, all of the requisite Teacher/Class/Student data was imported from the district's student information system, three years of Missouri Assessment data was imported, three years of prior district benchmark formative assessment data was loaded, and training was scheduled. The entire solution was operational for the district within sixty (60) days from the day the contract was signed. The district is currently being evaluated by the Missouri DOE as a model that other MO districts can use.

District/Customer Name: Harford County Public Schools
Address: 102 S. Hickory Ave., Bel Air MD 21014
Contact Name: Marian Stewart
Contact Title: *INFORM* Project Manager, Office of Accountability
Contact Phone Number: (410) 588-5364
Contact Email: marian.stewart@hcps.org
Contract Period: 2005 - 2010
Number of Students: 39,000
Number of School Sites: 60
Estimated Number of Teachers: 2,800

In 2005, Harford County Public Schools (HCPS) issued an RFP to identify a vendor whose web-based solution would enable educators to be able to identify student strengths and weaknesses at the learning object level, align instructional materials, lesson plans, interventions, and other tools of instruction to learning standards, and track student achievement from multiple measures of assessment types. HCPS chose EDmin's *INFORM Learning System* solution as its Instructional Management Data Management System, and implemented the solution district-wide (43,000 students, 40 sites). The *INFORM Learning System* provided HCPS with a total academic management solution that included decision support tools, assessment and accountability, instructional management capabilities, and powerful reporting tools. EDmin was chosen over other vendors because of the ease of use, the powerfulness of the *INFORM Learning System*, and the project management approach to implementation. HCPS is a leading school district within Maryland and the *I INFORM Learning System* solution

efficiently distributed data to schools, administrators, and teachers. The *INFORM Learning System* also facilitated analysis of multiple student performance measures, and converted data into educator knowledge that enabled educators to take immediate action regarding student learning intervention(s).

EDmin's Project Management team helped the district to import Teacher, Class, Student, and Staff data as well as State and Local Assessments. Multiple Measures reports were created to aid HCPS in viewing multiple assessments in a single report with the ability to aggregate and disaggregate the data based upon the District's demographic filters. Educators at HCPS were not only able to view at-risk students through easy to use graphical reports; they could also find resources aligned to the Maryland State Voluntary Curriculum Standards to help those students. HCPS used the interventions tracking component to measure progress students requiring special needs, services, or interventions.

COMPANY BACKGROUND & EXPERIENCE

EDmin is a privately held corporation that is headquartered in San Diego, California and has offices in Colorado, Connecticut, Minnesota, Texas, and Washington. EDmin was founded in 1989, incorporated in the State of Delaware, and has been doing business in the K-20 marketplace for more than 21 years. We have been providing learning and accountability solutions since 1997. Through the power of the Internet, the company's web-based products and services provide a complete learning and accountability solution to help school districts meet the specific guidelines of the Race to the Top (RttT) and No Child Left Behind (NCLB) legislation. We recently completed our twenty-fourth consecutive quarter of profitability. As a result, EDmin purchased Educational Gateways (EdGate) and more recently the Instructional Data Management System from Educational Testing Service (ETS). EDmin's financial base is strong and a copy of audited financial statements will be provided upon request.

EDmin was the first vendor to develop a web-based instructional data management solution. Microsoft, Hewlett-Packard, TetraData, Scantron, Educational Testing Service (ETS), Dukane, School Town, School Messenger, RM Education, and Mondo Publishing have all successfully partnered with EDmin on major deployments because EDmin has proven its' ability to design, develop, and deliver solutions on time and within/under budget.

EDmin is proposing a solution for which EDmin will be the sole provider. EDmin currently serves a user base of more than 4 million in all 50 states with its wide array of applications now integrated into a robust learning and accountability solution. EDmin has successfully deployed its systems in statewide, large district, consortia, and small-to-large sized district implementations and has always come in under budget and on time. EDmin has 74 full-time employees with 23 technical and service staff to support installation, training, documentation, and maintenance efforts for current products and clients, as well as new product development and system enhancements. EDmin has experienced less than a 10% staff turnover rate over the last three years.

In late 2004 EDmin was awarded the Maine Data Management System (MEDMS) Request for Proposals to provide a tracking solution that would enable the School Administrative Units (SAUs) and Local Education Agencies (LEAs) to track certification and student achievement aligned to Maine standards. As a result of that contract, EDmin began developing an academic data warehouse that utilized the decision support functionality of the company's *INFORM Learning System* product and combined powerful data integration to enable clients to have access to data from multiple sources through a single sign-on (SSO). The resulting effort generated our enterprise solution for assessment, reporting, resources, and community/communication tools: the *INFORM Learning System*. Since 2005, EDmin has focused its development effort on enhancing the current decision support functionality to include the *INFORM Learning System's* Enterprise Data Center applications so that clients have the ability to track student progress from multiple data sources longitudinally, as well as have ease of use in accessing interventions, special education, professional development, financial reporting and cost-benefit analysis, and instructional/learning resources aligned to standards. The key differentiator of the *INFORM Learning System* is that the solution enables users to transform data into information upon which sound decisions can be made and implemented. As users begin to view longitudinal performance results, and use the filter queries to view the data, users can immediately see what works for each student over time. This enables best practices to be quickly identified and institutionalized.

EDmin's products and services are in use by many of the leading school districts nationwide, representing over 1,200,000 students in more than 400 districts, as well as six current or prior state-level engagements (Hawaii, Maine, New Mexico, Rhode Island, South Carolina, and Wyoming). Our client base includes large districts with more than 320,000 students as well as small districts with fewer than 500 students.

INFORM® LEARNING SYSTEM TECHNICAL ENVIRONMENT & INFORMATION

The *INFORM Learning System* is built upon a Microsoft SQL platform and is hosted at a secure co location facility. EDmin owns and maintains all infrastructure located at the co-location facility, including all server, storage, network, and security equipment. The solution is accessible through a standard web browser on Windows PC's compatible Windows XP, Windows 7, and Macintosh PC's compatible with Macintosh OS 10.4+.

The *INFORM Learning System* runs on Intel x86 compatible hardware platforms and is developed on the Microsoft.NET software platform. The *INFORM Learning System* is hosted at a secure co-location facility. EDmin's data center operations, that include daily/weekly/monthly backups and any client restore requests, are included with the *INFORM Learning System* license fee.

Network Infrastructure

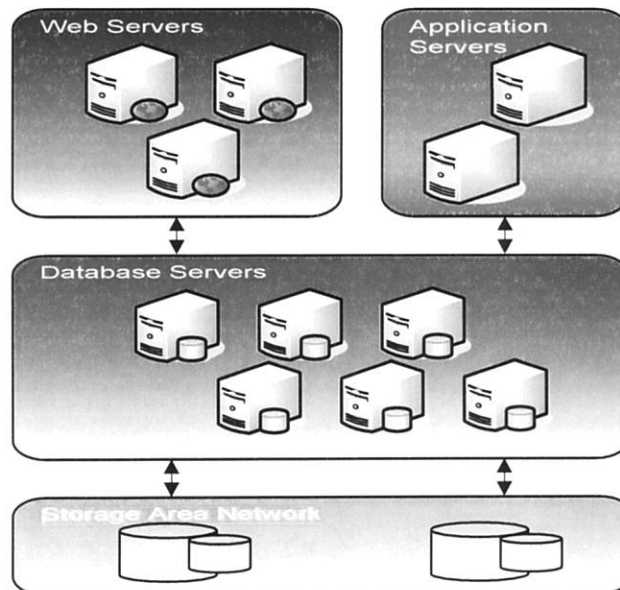The *INFORM Learning System* network infrastructure is outlined below:
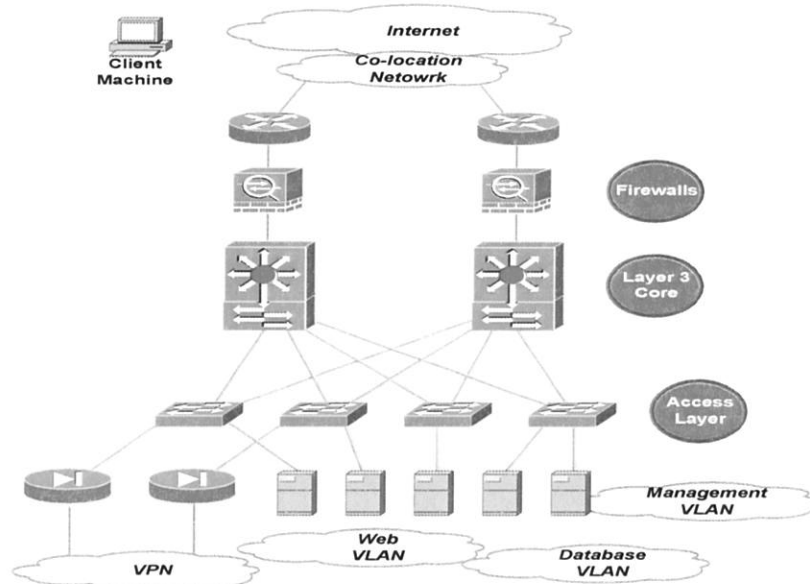
Figure 1: Network Infrastructure

System Infrastructure

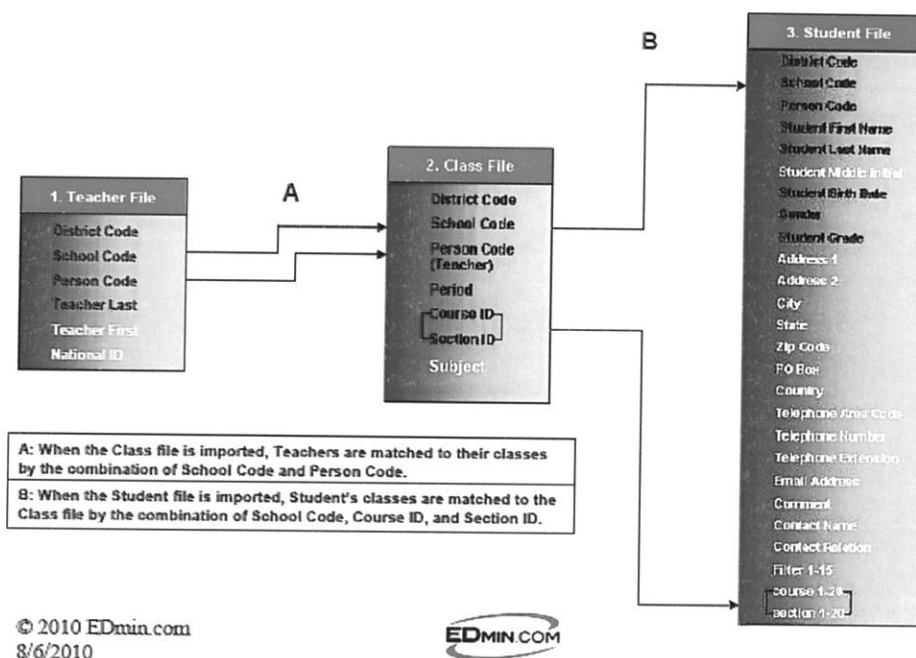The diagram below outlines the *INFORM Learning System's* infrastructure:

Figure 2: System Infrastructure

The *INFORM Learning System's* Enterprise Data Center is a cross-language application, written primarily in ColdFusion, with an ever-increasing code base in

.NET 3.5 SP1. Data is housed on SQL Server 2000 Enterprise RDBMS and the majority of data access/manipulation is done through stored procedures (Note: migration to SQL 2008 is scheduled for August 2011). The *INFORM Learning System* application has over 700 stored procedures, with the accompanying *INFORM Learning System* Data Center (IDC) application (100% .NET 3.5) being supported by additional databases with over 800 stored procedures. Data movement is accomplished by a variety of methods, including Bulk Insert, BCP, DTS, and custom Extract, Transformation, and Load (ETL) applications (primarily through the *INFORM Learning System* Data Center - IDC). The application is written such that itself and supporting applications can be multi-homed (IDC front/back end on separate servers, etc). The SQL is housed on a standalone server. The web front ends are hosted by virtual machines, making for ease of backup/recovery/cloning. The minimum recommended operating system is Windows Server 2003 R2. Full SQL backups are done daily.

The *INFORM Learning System* provides a set of comprehensive ETL tools which allow clients the capability to map external data sources to the *INFORM Learning System* data model. As part of a standard *INFORM Learning System* implementation, clients have the option of using our Import Manager feature which allows clients to create schedules, setting time of day and frequency for Student Information System (SIS) data loads into the *INFORM Learning System*.

Data Integration/ETL

The *INFORM Learning System* contains an academic data warehouse that securely houses and stores relevant data pertinent for monitoring student progress from standardized assessments that can be used as a predictive tool for high-stakes state testing. Relevant data elements may include relevant demographic data for students and teachers, Teacher/Class/Student data to provide accurate student rosters, performance data from high stakes state tests and district benchmark assessments as well as classroom progress, interventions, attendance, grades/report card data, state/district standards, professional development tracking, special education data, and business and financial data pertaining to student achievement. The Multiple Measures Reporting features make it easy for district and school staff to run reports. The diagram on the following page shows how the Teacher/Class/Student files are imported:

## TCS Import Order – Teacher, Class, Student

A: When the Class file is imported, Teachers are matched to their classes by the combination of School Code and Person Code.

B: When the Student file is imported, Student's classes are matched to the Class file by the combination of School Code, Course ID, and Section ID.

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Figure 3: TCS File Import

The *INFORM Learning System* provides various methods for data integration, which are part of the core *INFORM Learning System* package. These include the SIS interface and the Assessment Scores interface which are part of the *INFORM Learning System* Enterprise Data Center module. Tennessee DOE's system administrators will receive training on how to use these features. EDmin also provides data integration services through the establishment of a service bank for custom data integration needs.

Through the *INFORM Learning System's* ETL tools, districts can easily load data from various data sources (i.e., Aeries SIS, NWEA Map, Reading data from DIBELS, DRA, etc.) which are then stored on the *INFORM Learning System* Enterprise Data Center (EDC). Users are able to generate various reports through a role-based decision support platform that allows for the use of ad hoc queries and various filtering of data for effective graphical and dashboard reporting. The *INFORM Learning System* is capable of reporting on longitudinal and historical data. When combined with other data sources, new custom reports are easily created through the Multiple Measures reporting capability.

Districts that have separate data warehouses for additional reporting needs use the *INFORM Learning System* data center to extract data through a second level of ETL, that addresses those additional reporting needs within a data warehouse, and provide the classroom teachers with a much more intuitive interface that includes transactional capabilities. For example, EDmin's professional

development *INSTRUCT* management and tracking application allows for the management of professional development courses. *INSTRUCT* allows users to register for courses and provides a comprehensive platform for the management of course enrollment, credits and teacher transcript reporting. Much of the teacher data comes from a district's human resources system and that data can easily be imported into the *INFORM Learning System* to populate relevant teacher data files.
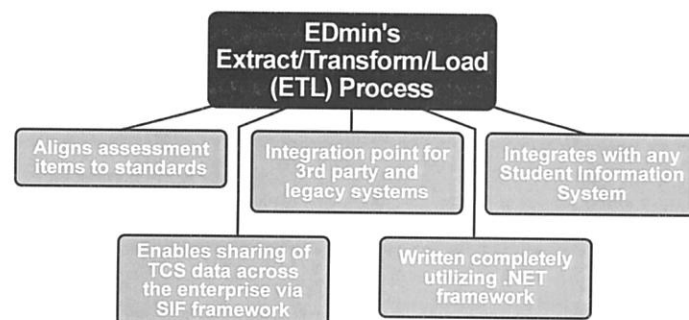
The diagram below depicts EDmin's strategy/road map to integrate each role in the educational enterprise and is supported through a combination of core products to seamlessly support Tennessee DOE educational initiatives:
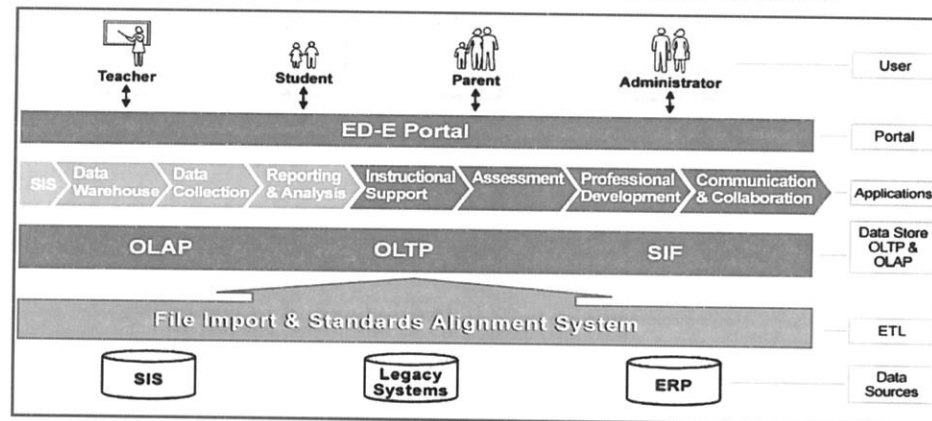
Figure 4: **Road Map to Integration**

EDmin has matured the *INFORM Learning System* ETL tools over many years to ensure smooth data integration of external data sources, while maintaining data integrity. The graphic on the following page (*Figure 5*) describes the *INFORM Learning System* Data Center ETL process that is the data integration process for all data contained in the *INFORM Learning System*:

File Import & Alignment System Benefits

EDmin's Extract/Transform/Load (ETL) Process

- Aligns assessment items to standards
- Integration point for 3rd party and legacy systems
- Integrates with any Student Information System
- Enables sharing of TCS data across the enterprise via SIF framework
- Written completely utilizing .NET framework

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Figure 5: File Import

The *INFORM Learning System* contains the powerful *INFORM Learning System* Data Center that functions to connect any type of data to the system:
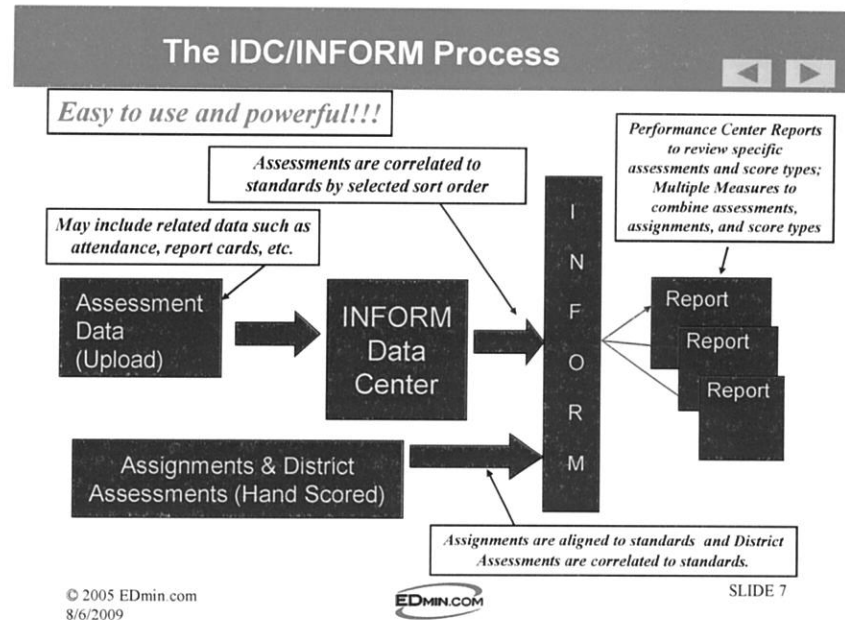
Figure 6: IDC/INFORM Learning System Process

This ETL process enables the *INFORM Learning System* to import third-party data in three easy steps presented below:
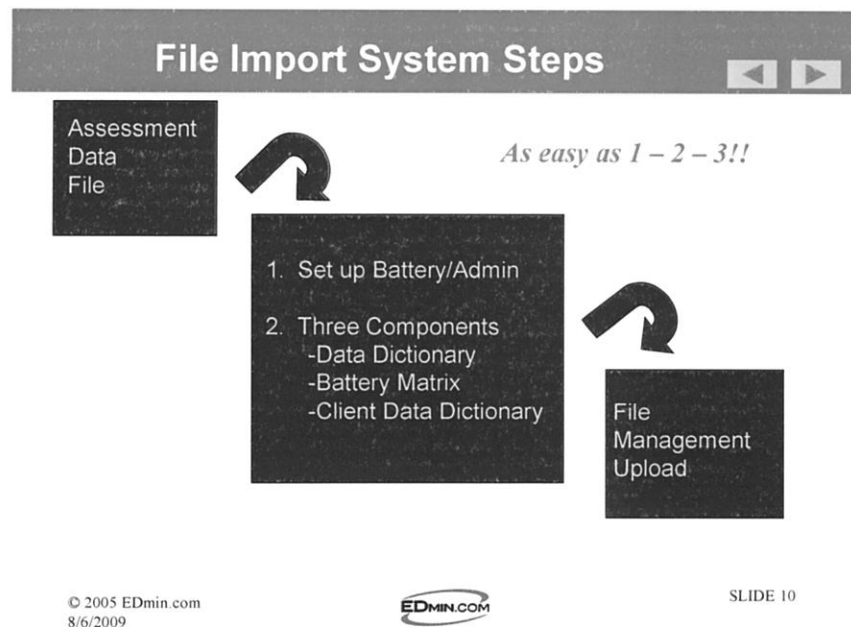
Figure 7: File Import System Steps

The diagram below shows EDmin's open architecture and examples of how we can seamlessly import data from other providers (e.g., Oracle, Edusoft, DataDirector, Wireless Generation, ETS, Acuity, and many more):
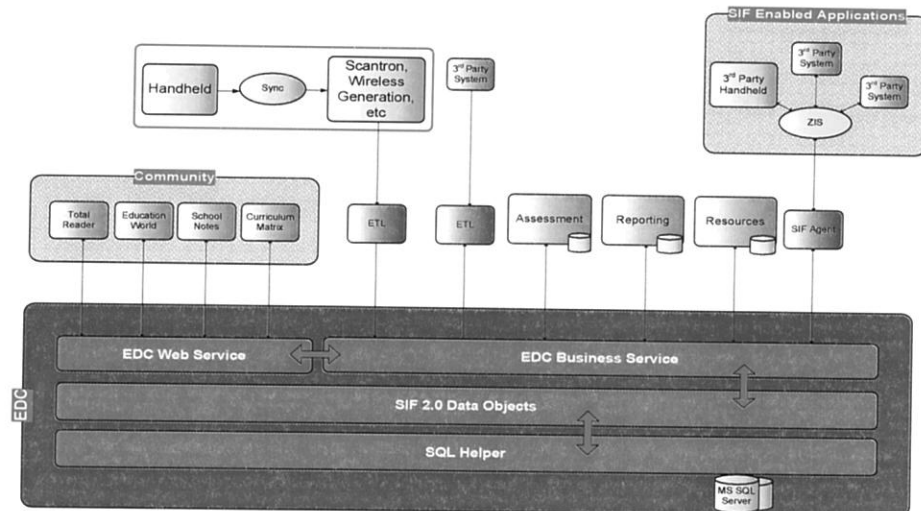
Figure 8: File Import System Steps

Alternatively, the *INFORM Learning System* supports the Schools Interoperability Framework (SIF) model which can be used for the transfer of student enrollment data from the client's SIS to the *INFORM Learning System*. Either method generates various audit reports which provide the results of the data loads. In addition to a standard set of business rules which are applied to the data to ensure successful processing, additional business rules can be configured by clients to establish thresholds for errors to help maintain data integrity within the *INFORM Learning System*.

Security

For security, EDmin has the front and backend servers segregated by VLAN and only designated ports are accessible on the web servers. Every site is protected by Secure Socket Layer.

EDmin's implementation of network security is multi-tiered. There are redundant firewalls in place at each external access point, along with firewalls between the data centers and the local area network that comprises the office network. The networks both in the data centers and in the office are separated into VLANs that segregate traffic and access. The VLANs in the network design separate database servers from application servers and the rest of the network. Access via SSH is highly restricted and on approval basis only via the Network Security Department.

All access to information and business resources is determined by role (Role Based Access Control). Developers do not have access to production systems; this is limited to Operations staff. Operations staffs do not have access to SQL

Server DBMS (limited to DBA's). Access to physical facilities is controlled by individually assigned combination codes on a keypad, and biometric (fingerprints) data as well.

All access to UNIX based servers is via SSH, all access to Windows based servers is via a VPN – both of which provide an extra layer of access control. Active directory has been implemented for granular control of resources on the systems. The UNIX based systems are being migrated to a LDAP implementation that meshes with Active Directory. All systems and applications have extensive logging enabled, and these logs are reviewed on a regular basis by the Network Security Department. In addition, ad hoc audits are conducted on the systems access and usage logs. Network segments are also scanned regularly. All network equipment follows the standard of logs being channeled to a syslog server.

Physical security is multi-tiered as well. All production systems are housed in *INFORM Learning Systems'* data center that is manned 24/7. The data center has biometric access only to the data systems floor. The HVAC system maintains a standard temperature and humidity level. Cameras are employed that cover all areas of the data center floor. Access to the physical cabinets where the systems are stored is via individual key codes that are verified against the biometric codes. Access is highly limited and subject to verification.

DATA MODEL & REPORTING

The following information is provided to summarize EDmin's *INFORM®* Learning System data and reporting components. **EDmin's proposed solution is deliverable immediately, can be easily personalized and customized to meet Tennessee DOE's specifications, and provides an extremely cost-effective solution to implement.** The *INFORM Learning System's* open platform architecture supports the minimal customization necessary to meet all of Tennessee's needs for a longitudinal data system. The proposed solution will provide numerous report display formats including, but not limited to, dashboard, longitudinal, comparison, multiple measures, predictive/trends forecasting, alert notification reporting, etc. Although the proposed solution is a commercial-off-the-shelf solution, EDmin can customize any of the current functionality to meet the needs of the Tennessee DOE.

The *INFORM Learning System* application is a powerful summary reporting tool that will enable Tennessee DOE users to view a snapshot of current student performance at the student, class, school, and district level. All student demographic data is obtained through automatic data uploads from the existing student information system (SIS). This Teacher/Class/Student data is then mapped to student achievement indicators to produce comprehensive reports.

The following screen shots are representative of the types of reports that can be generated; however, reporting functionality is not limited to just these examples.

Trends Analysis and Dashboard Reporting

The screen shot below (*Figure 9*) shows how all of the schools in a district performed on a high stakes state test in reading. One school was selected by clicking on the trend line in the upper left-hand quadrant (view is displayed in the upper right-hand quadrant). Two years of test data was available. The upper right-hand quadrant shows the current trend (i.e., thick blue line moving upwards) and the forecasting (i.e., purple line showing that if nothing changes in the assessment or instructional methodology, the improvement will continue). The trend line can be used to predict how students will perform in similar tests in the future and provide easily interpretable trends analysis.

The lower left-hand quadrant shows how the selected school did, while the middle quadrant shows how many students fell into each performance category. The lower right-hand quadrant shows the actual students' growth in the selected performance category (Proficient) over the two-year testing period. The trend column can be sorted low-to-high for student grouping, or high-to-low. The dashboard report functionality is designed to provide snapshots of student progress over time and can be "pushed" out to all educators via e-mail (i.e., Push Reporting).
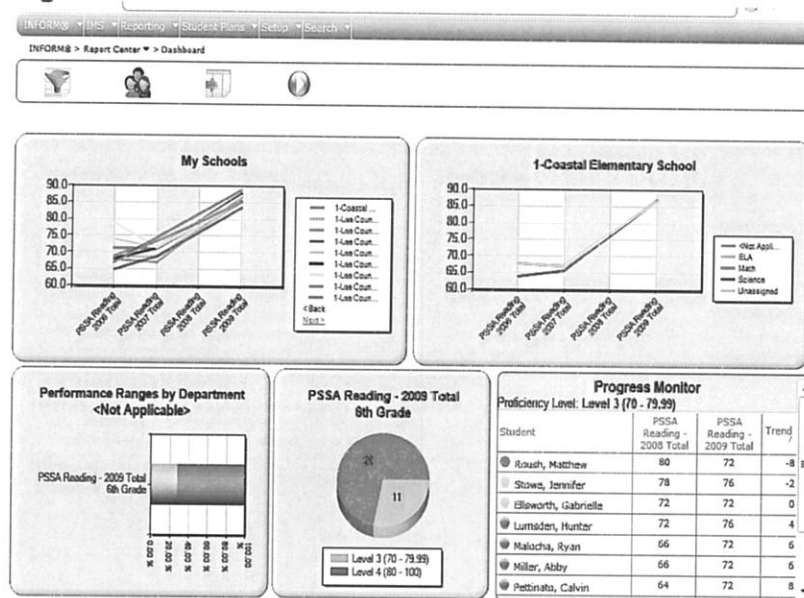
Figure 9: Multiple Measures Reporting

The screen shot on the next page (*Figure 10*) represents how the *INFORM Learning System* provides educators with easily interpretable reports showing student progress from multiple bodies of evidence. In this case, the screen shot shows an example of two years of high stakes state test results, total scores for a district formative assessment in Math, the individual Math strand results, and the most current report card grade for Math. The graphical view also enables

authorized and authenticated users to drill down into any column to see the actual number of students in each performance category (the color-coded sections), and identify the actual students in each category.
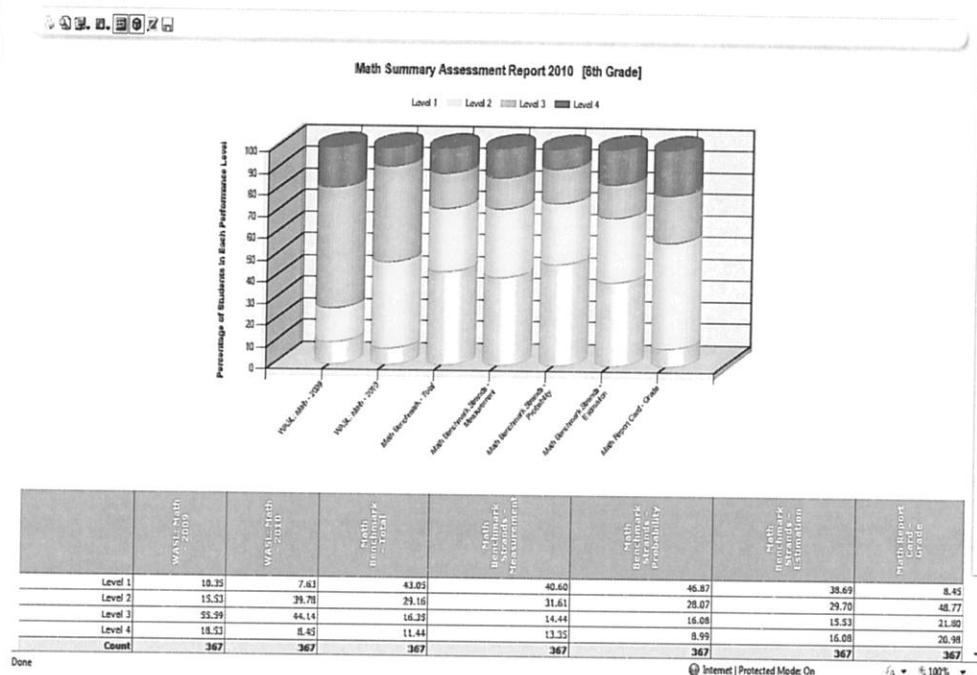

Figure 10: Longitudinal Reporting

The following screen shot shows multiple years of high stakes state test and district benchmark results, and the demographic attributes associated with each student. Each column in the screen shot is capable of being "drilled down" for ranking/sorting purposes (i.e., the color coding shows the student groupings by learning skill), as well as grouping by demographic attribute (e.g., all English Language Learner students, all students participating in a selected intervention type, etc.).

Figure 11: Color-Coding and Ranking Reporting

The *INFORM Learning System* will allow educators and administrators to:

➢ **Facilitate the disaggregation of data by demographic filters to view performance of student groups.**

➢ **Reports real-time district/LEA, school, classroom or student results through more than 300 reports – additional reports will be created specific to Tennessee DOE's specifications.** The *INFORM Learning System* contains more than 300 reporting functionalities and the data is made available through the ability to upload teacher, class, student, and assessment data nightly to ensure that all class rosters are current. As assessment data is loaded and mapped to the appropriate teacher/class and student, the data is immediately available for viewing - shortening the typical lag time for viewing assessments and enables teachers to take advantage of the "teachable moment" immediately.

➢ **Shows student results aligned to standards.** The *INFORM Learning System* is a standards-based reporting tool so all student achievement is reported and aligned to specific state/LEA standards. This enables users to immediately identify the learning gaps and ensures that instruction and learning are aligned to standards.

➢ **Maintains historical assessment data for longitudinal comparison and analysis.** The *INFORM Learning System* stores all historical assessment data associated with a student for as long as the student. The historical data is viewable through a complete set of longitudinal reports that enable the state/LEAs to compare year-to-year results on specified assessments, and track student learning gains/losses. This type of data enables administrators to immediately see the effectiveness of the curriculum scope and sequence, and identify best practices for sharing across the state/LEAs.

➢ **Provides easy access and ability to configure reports without HTML or programming language knowledge.** The *INFORM Learning System's* Multiple Measures Reporting (MMR) templates provide users with an easy to use wizard to create a template. All calculations may be identified and then selected for automation so that users do not have to perform difficult statistical analysis, or use HTML or any other programming language to create and configure the report(s). The wizards have been designed to perform these functions for the user. Users may drill down from the graphical view above to see the numbers of students in each performance level, and the actual students in each performance level simply by clicking on a column. The numbers and names of students then appear.

➢ **Provides the ability to manually enter student standardized test scores.** EDmin realizes that not all assessment data will be automatically loaded and that teachers frequently want to administer on-the-fly testing to assess classroom learning. EDmin has designed a manual entry functionality known as Enter Scores that enables teachers or specified personnel to manually enter the data and have the ability to immediately view the performance results.

➢ **Displays summative and formative assessment data for use as a baseline reference.** The *INFORM Learning System* accommodates

summative, formative, and local assessment data that enable users to establish baselines via the summative high-stakes state tests, for example, and compare that data to the formative assessments that are administered more frequently (such as district benchmark assessments). Additionally, formative assessment data from LEA benchmark, short cycle, interim, and individual classrooms may be brought in for further comparison and analysis.

➢ **Allows multiple modes of measurement (e.g., state, district, and local assessments) with 30+ score types.** As identified above, the *INFORM Learning System* accommodates *any* type of measurement data as well as score type(s) that includes, but is not limited to, formative assessments, summative assessments, classroom testing and assessment, and other types of indicators relevant to performance (i.e., attendance, report card grades, interventions, etc.).

➢ **Indicates which students are (or are not) meeting standards in specific tests by color-coding and graphs.** The *INFORM Learning System* presents data in two different types of displays: Tabular data and graphical representations. Tabular views enable the user to view performance data that is color-coded for easy interpretation when the data is sorted for low-to-high or high-to-low performance. Additionally, the tabular format enables users to see the cut scores and easily identify which students are on the "bubble" as well as view all the students within a specific performance range. The tabular format enables users to drill down and see individual student performance and all of the demographic data associated with the student(s). Graphical displays enable users to drill down into specific performance levels to see the students in the specific performance range, and rank/sort the student performance from low-to-high, or high-to-low.

PROJECT SUPPORT & IMPLEMENTATION

The EDmin Client and Partner Services Department will support the Tennessee Department of Education and has the proven experience and expertise to perform a successful implementation. Client and Partner Services team members consist of project managers and product specialists who are experts in establishing successful *INFORM Learning System* implementations for state departments of education and districts. Prior to your *INFORM Learning System* implementation, we will provide you with success stories and access to those who have successfully implemented the solution. This will be an opportunity to acquire, learn, and institutionalize best practices to produce results in Tennessee.

Your EDmin Project Management Institute (PMI) PMP-certified project manager or supervised client engagement manager will manage your implementation with best practices set forth by the internationally recognized standard for Project Management: *A Guide to the Project Management Body of Knowledge -- Forth Edition.* With Client and Partner Services to manage your *INFORM Learning System* implementation, you will save costs by:

• Identifying and communicating implementation goals and strategic

objectives;

- Identifying the critical success factors for your implementation;

- Planning the development, design, and implementation up front and then focusing on the immediate critical tasks to complete;

- Identifying and efficiently resolving issues and planning for their resolution or avoidance;

- Working within the scope of the project and properly managing scope changes;

- Understanding the roles and responsibilities of the project team and effectively communicating with team members and stakeholders; and

- Deploying a higher quality implementation sooner.

Implementation Plan and Methodology

EDmin is well known for its strong implementation and project planning. EDmin understands the state's vision. EDmin will provide Tennessee with a comprehensive project plan once the project implementation timelines are agreed upon between EDmin and the Tennessee DOE. Below is a high-level project summary:

1. **Initiation and Design Phase:** The initiation phase will include the review of state technical environment and data marts; Development and approval of the project approach, milestones, and timelines. EDmin's proposed solution has been developed and deployed in other states/LEAs. Therefore, this phase would include requirements gathering for customizations, design, risk mitigation and quality assurance strategy documents. EDmin will also conduct System Administrator and Risk Assessment Workshops shortly after the project kickoff meeting.

2. **Construction Phase:** EDmin is recommending a phased-in approach of the system with rigorous quality assurance testing and deployment strategies. See Customizations/Development/Deployment Methodology section below for details.

3. **Implementation Phase:** Through a phased-in implementation, EDmin will deploy/launch the system, conduct end-user training, and provide technical support to the State. EDmin offers strong client support and has implemented a successful deployment and issues management approach. All issues are recorded in our TeamTrack system to ensure designated staff addresses each issue. Tennessee's Client Engagement Manager will monitor and report the status on a regular basis. EDmin will provide complete technical requirements, system documentation, and training. Staff will have acquired the necessary knowledge and training to be fully prepared for the system and client support transition.

The deployment time includes but is not limited to:

- Conducting pre-implementation planning meetings and implementation deployment planning meetings (i.e., daily/weekly meetings plus e-mails and phone calls as needed).

- Mapping Tennessee strategic initiatives and leading indicators to the implementation strategies to be deployed.
- Importing the requisite Teacher/Class/Student data from the data marts that will enable the *INFORM Learning System* to deliver assessments to teachers and students, produce the student achievement reports, and populate the curriculum templates.
- Validating the data through a minimum of two manual imports so that the scheduled imports may be automated according to the schedule determined by Tennessee.
- Providing system administrator training to those individuals Tennessee designates as the solution's system administrator(s).
- Scheduling training at the state/LEA/administrator and teacher levels.
- Conducting the training.
- Monitoring the project plan and revising as determined necessary.
- Providing Tennessee staff with all of the knowledge and training required to successfully conduct Extract, Transformation, and Load (ETL) processes.
- Conducting and demonstrating to Tennessee staff that the proposed solution is powerful and robust enough to pass volume/stress testing, production testing, and process testing.
- Setting up a User Acceptance Test site for Tennessee site to use for user acceptance testing.
- Provide support through an 800 number to the Help Desk, as well as having direct access to the project manager, client relationship manager, and client engagement manager.
- Supporting the Tennessee team as it continues through the deployment phases, both directly and indirectly, with onsite and web-based support.
- Conducting quarterly executive leadership review and evaluation sessions.

Every project should have at least a small number of identified critical success factors to identify how and when the project will succeed. Critical success factors may be stated in the form of requirements. In addition to having critical success factors for the overall project, EDmin will work with the project team to determine the critical success factors for each phase of the implementation.

EDmin recommends the following six critical success factors for any successful implementation, and during the course of the implementation, EDmin will help Tennessee identify more. These are based on work with dozens of clients who have achieved successful implementations:

1. Senior leadership, especially those who developed the vision for the implementation, must stay involved early and often. Develop and/or identify educational goals Tennessee wants the implementation to meet and determine the strategic value of the *INFORM Learning System* (e.g., how does *INFORM* support your state and LEA improvement initiatives,

career educational planning objectives, and a cycle of continuous improvement?).

2. Leadership to protect resources and funding while removing organizational roadblocks. Develop and use subject matter experts. Start with those on the Client and Partner Services team and consider how knowledge transfer will help build Tennessee's expertise.

3. Empower the project team members to escalate and/or resolve issues with minimum delay.

4. Plan Tennessee resources and pace the implementation appropriately. Take many small steps rather than trying to implement everything at once. Achieve and communicate quick wins to showcase the benefits of implementation to garner support and motivate the team.

5. Make sure there is adequate and effective end-user training. Identify a core team of super-users who will become early adopters and help spread training and transfer knowledge within the state.

6. Staff, teachers, students, parents, and others will successfully use the purchased solution and generate continuous improvement.

Communications Plan: Tennessee and EDmin staff will work together to ensure clear communication among all solution partners. The Client and Partner Services team will provide Tennessee with a communication plan that specifies project team contacts, key project stakeholders, and communications to address needs, an escalation process, Help Desk protocols, and a product support process.

Customizations/Development/Deployment Methodology

A schedule of regular meetings will be established immediately with key stakeholders and weekly project status reports will be provided.

Tennessee will require personalization and customization of the solution to meet local pedagogy practices and business rules. The general steps necessary for a successful customization project are as follows:

Requirements Identification: EDmin will work with key stakeholders at Tennessee to identify the necessary customization.

Requirements Definition: EDmin will take the information gathered during the identification process and produce a requirements document that outlines these changes. This document will serve as the development roadmap. Once the requirements have been reviewed and approved in writing by Tennessee, development work commences on the requested customization(s).

Risk Management Approach: EDmin's Client and Partner Services team recognizes that project risks may arise from many sources (see *Figure 12* on the following page). To assist Tennessee with protecting the value of the investment in the *INFORM Learning System*, we are pleased to offer a Risk Assessment Workshop as part of our implementation planning process. Risk management is

the art and science we use to assess and respond to the risks that exist throughout the life of projects. EDmin does this so projects are successfully managed within the triple constraints of cost, quality and time. Using risk management, we identify those factors which can negatively impact the *INFORM Learning System* implementation, quantify the results and identify strategies to minimize the occurrence of risks and their impacts.
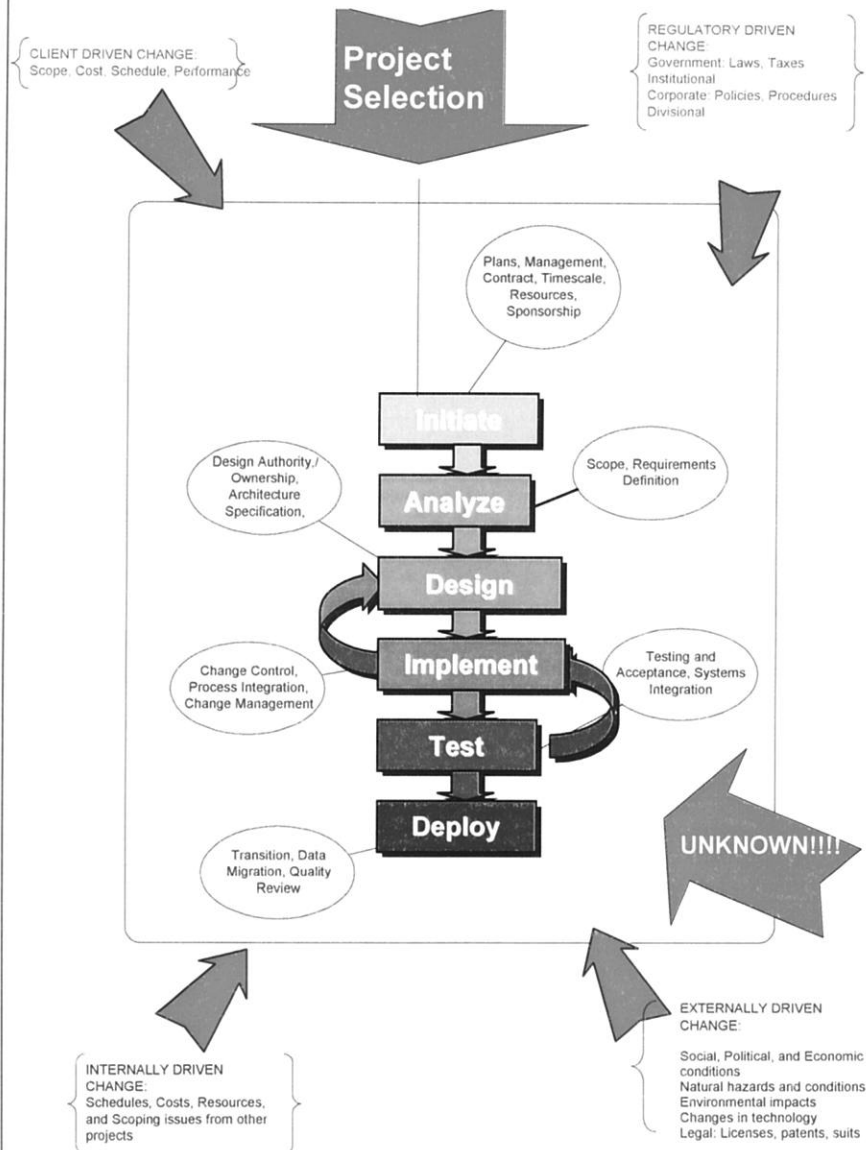
Figure 12: Sources of Risk

During the Risk Assessment Workshop, EDmin will facilitate an assessment of the Tennessee tolerance-to-risk, the identification of internal and external risks which may impact the implementation, assist in the evaluation of their significance and impact, and assist in planning appropriate responses and plans to mitigate these risks using the following simple methodology:
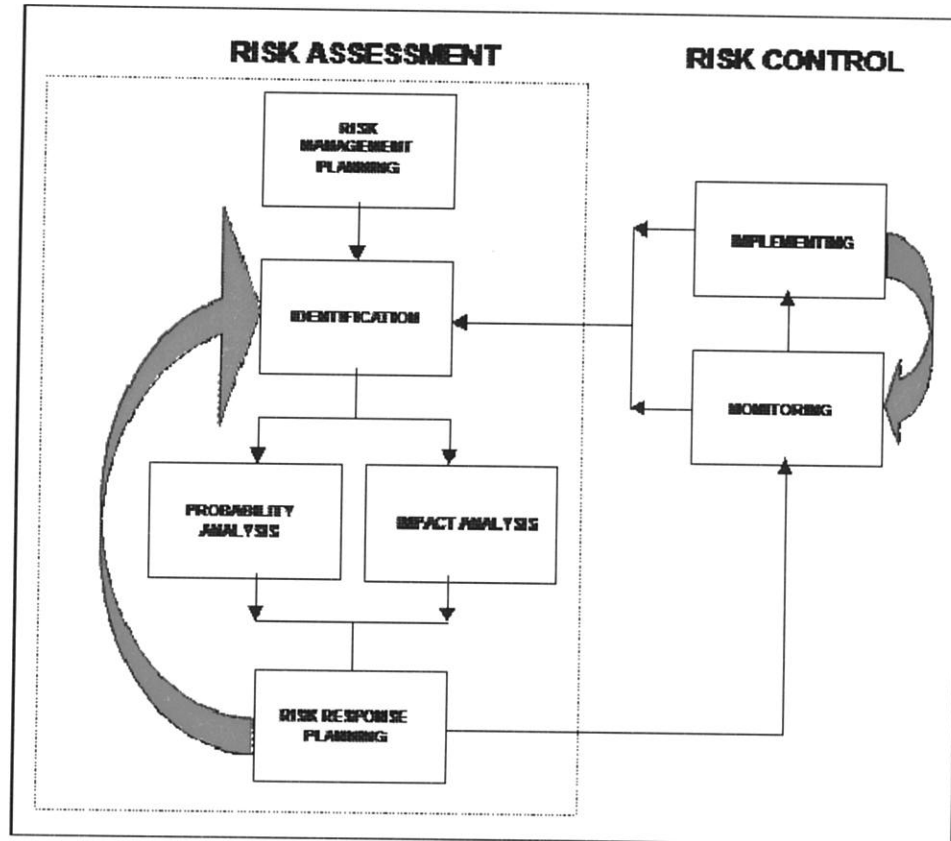
Figure 13: Risk Assessment

During the risk assessment for Tennessee, EDmin will plan the risk management, identify risks, quantify them in terms of probability and impact, and plan how to respond to risks. As responses are planned, new risks may be introduced. In this case, staff would return to identification to make sure these are properly identified. When staff are comfortable there have been sufficient iterations, Client and Partner Services moves into risk control which coincides with project execution. Client and Partner Services will monitor the project and the environment for risks. If a risk event seems imminent, the risk mitigation strategy is implemented. EDmin staff will return to monitoring, but more important, there is a need to recognize that the project may go down a new path with new risks. This means staff will need to return to risk assessment and start identifying and planning for these new risks. The workshop deliverable is a risk log with identified risks, Tennessee documented expectations, and EDmin's completed Risk Management plan ready for integration with Tennessee's overall implementation plan.

Change Management Approach: When a major change is necessary for the Tennessee implementation plan, Tennessee's Client Engagement Manager will prepare a change request advising you of the impact in terms of cost, resources, and time. Once Tennessee signs off on the change, the Client Engagement Manager will take appropriate steps to manage the change, which may include entering Service Requests, gathering requirements, or entering a "ticket" into TeamTrack.

Requirements Review/Signoff: Completed requirements will undergo an internal technical review. Feedback will be incorporated into the document. Once the technical review is completed, the requirements document will be given to Tennessee for review. EDmin will then walk through the requirements document with Tennessee to ensure a clear understanding of the proposed project. Tennessee feedback will be incorporated into the document. If both EDmin and Tennessee deem the document complete, both parties will sign-off and development will begin.

Coding: The development team will be given the requirements document and coding/database design will begin under the direction of the project manager. The necessary/requested checkpoints with Tennessee will be established to review/refine the work. Any changes to the requirements will be handled via signed change control documents and log.

Testing: Once development is complete the new development will go through a thorough Quality Assurance testing phase.

Documentation: The new functionality will be documented when applicable.

User Acceptance: Once testing is complete, the new development will be deployed to a User Acceptance (UA) site. EDmin will walk through the customization with Tennessee to ensure it functions as designed and meets the State's needs.

Quality Management Approach: Prior to release, all code is unit tested by the developer and system and regression tested by Quality Assurance (QA). Initially code is deployed to UA sites where further testing is performed. While on the UA site(s), Tennessee will have an opportunity to review new features and functionality and determine if they want to activate them when the release goes to production servers, usually within two weeks. Once deployed to production, QA again will smoke- test the release to ensure the system is user ready.

Production Deployment: Once Tennessee has reviewed/signed off on the customized functionality, the functionality will be deployed to the production environment and available for use.

<u>Training</u>: Training on the new functionality will be provided, if necessary. The necessity of training often depends upon the scope of the changes. EDmin always strives to make functionality intuitive enough to minimize training requirements.

<u>Issues Management Approach</u>: All issues are logged in TeamTrack where an automated work flow ensures all issues are delivered to the EDmin staff designated to address each issue. Tennessee's Client Engagement Manager will report the status on a regular basis, or determine the status of your issue at any moment in time. Service Requests are typically completed in 7-10 business days.

TRAINING

EDmin is recommending the "Train-the-Trainer" model to Tennessee for several reasons. Train-the-trainer, and the training certification EDmin has developed for trainers, ensures that INFORMation and knowledge are seamlessly passed in a consistent, rational, and coherent model within the district at all times in a very cost-effective manner.

For a statewide implementation, EDmin recommends a Train-the-Trainer model on a regional basis so that multiple system administrators, trainers, and project managers are trained onsite during a scheduled training session. The Train-the-Trainer training would be augmented by a series of follow-up training webinars so that content is chunked to enable the users to apply what they have learned in real-world environments and then come back to learn more. The content is stair-stepped so that as the user learns one fundamental concept, the training continues to build on the learned concepts and enable the user to apply knowledge to advanced applications.

EDmin's training certification has been designed to be offered both onsite and in a self-paced, on-line environment. The training identifies major topics and sub-topics, sub-topic components, and then "chunks" the training into manageable portions that allow for hands-on demonstration of key concept mastery. When the training occurs online, users have access to a master trainer and participate in online forums throughout the week.

Training involves using real student data, curriculum, learning and instructional resources, and actual hands-on application to facilitate the "learn-as-you-go" approach that works best for adults. The Train-the-Trainer approach enables concurrent training to occur in multiple locations. This increases the number of people who can be trained within a limited timeframe. Training materials are also modeled on principles of adult learning and are available in a variety of formats: text, CD, online access that is printable, Web-EX seminars, etc.

Training Model

EDmin proposes a combination of a "Train-the-Trainer" model coupled with direct user training by region. This hybrid model is essential for

several reasons:

- Different aspects of the solution require greater in depth knowledge at the state and district level of how the different solutions work together.

- The solution providers have identified effective training models for individual applications; however, comprehensive system administrator training is needed at the state level to coordinate and facilitate the solution integration.

- Teacher training is quite different from system administrator training.

- Phased-in implementation plans allow for concurrent types of training to occur. The hybrid model allows Tennessee to receive cost-effective professional development that maximizes its investment while minimizing the impact on staff.

EDmin recommends three distinct groups for training:

System Administrator – The bulk of this training covers use of the *INFORM Learning System* as the academic data warehouse that will store performance data. Training covers the application setup and long-term administration of the system for Tennessee. This person (or team of Tennessee staff members representing technology, curriculum and instruction, instructional services, research and assessment, student information/information technology, etc.) learns precisely what it takes to administer the *INFORM Learning System*, set up the system's templates, extract and import student/teacher/class files, standardized test data, and generate the types of reports necessary for district decision-making. Additionally, this person or team learns how to refresh the data and schedule automatic uploads from the data marts into the *INFORM Learning System*. This type of training is best conducted in a formal training environment, either onsite at the state in a location where interruptions are minimal, or at EDmin's facility in San Diego.

State/LEA/School Administrator – State, district administrators, and principals are the primary target for this type of training. At different intervals, the division and school principals are taught the basic fundamentals of how to navigate through and use the *INFORM Learning System*. These training sessions cover topics such as how to use the various applications of the solution, how to access standardized test and assessment data, etc. Principals are also taught how to review aggregate and disaggregate data, look for trends, question what works (and what does not) and ascertain why. This type of training can be conducted on site at Tennessee training facilities.

Teacher – Teacher training covers browser basics, computer essentials and fundamentals, navigation through the system, and accessing or generating reports, etc. This type of training can be delivered onsite through use of district- designated trainers or direct instruction delivered to core teachers by EDmin staff.

EDmin has previously developed, through its Technology Planning Division, a series of surveys that can be used to effectively ascertain the level of school administrator and faculty proficiency with use of technology. The information obtained from these surveys is then used to tailor training programs to bring people up to an optimum skill level as quickly as possible.

Finally, EDmin has developed a formal program for *INFORM Learning System* training at all three levels that ensures the "Train-the-Trainer" approach is seamless from one trainer to another new group of users. These programs target three user skill levels and have been designed to help develop leadership and decision-making skills required for change agents:

- **Initial** - Users learn the basics of navigation and use of the *INFORM Learning System* and begin accessing standardized testing data and multiple measures data.

- **Basic** - Users learn to ask questions to spot trends (i.e., "What is the data telling you?" "Why are you obtaining the results you are?" "What learning resources appear to help?" "Why?" "What are you learning from these data?" etc.). They also learn to identify areas requiring improvement and develop strategies for intervention.

- **Proficient** - Users learn how to incorporate strategic planning activities with implementation tasks and how to monitor, evaluate, and assess their on-going effectiveness.

Training occurs after the error free data import of student, teacher, class files, standardized test results, and site data has been completed by EDmin and validated by the state. Once a contract has been signed, however, the process for preparing the data into the desired file formats can begin immediately.

Training occurs through a guided and facilitated approach in a face-to-face environment initially. The participants are given a brief overview of what they will be doing, followed by hands-on application. A discussion period follows during which participants are asked to reflect on what they learned, how they will apply the training, and what they will be doing to share their new-found knowledge with others. This is followed by more

hands-on activities that require specific tasks to be done using real data. EDmin utilizes a pedagogical approach whereby adults are asked to use their experience base throughout the training sessions for reflection. Training is outcome based and participants are active throughout each session rather than passive spectators. Other training is available through CDs, training manuals, online request and help-desk approaches.

EDmin provides training that is based on a "Train-the-Trainer" approach so that a core group of teachers are thoroughly trained and capable of functioning in "early adopter" roles. This approach enables people to mentor, coach, and guide the training for other individuals located at their respective sites. This model ensures that local capacity growth is not thwarted by dependency upon a third party to provide the required training services.

On-going training is available through electronic tutorials, CDs, and text material. Additional onsite training is also available.

Benefits of the Team Training Model

The Train-the-Trainer approach enables concurrent training to occur in multiple locations. This increases the number of people who can be trained within a limited timeframe.

EDmin believes its training approach is solidly modeled on principles of adult instructional methodology. The training employs adult models of learning and is founded on experiential learning concepts. Training involves using real student data, curriculum, learning and instructional resources, and actual hands-on application to facilitate the "learn-as-you-go" approach that works best for adults.

Training materials are also modeled on principles of adult learning and are available in a variety of formats: text, CD, online access that is printable, Web-EX seminars, etc.

One unique feature of the EDmin training team is that our trainers are experienced educators who understand the professional development needs of the various user levels. Our trainers have experienced the same issues as your educators and can bring a wealth of experience to the training sessions to make the training practical, relevant and engaging. An instructional management system is about making sense, and our training formats are designed to operationalize this concept into real world environments.

		Documentation
		EDmin is prepared to provide documentation for both training and system administration. System administration documentation is provided in both text and online help formats that are printable. Technical specifications are also available. Additionally, EDmin issues release alerts well in advance to clients prior to new version releases with notice of any new supporting software requirements as long as a contract is in place.